

of the tubes, and some even regard the contractions of their lumen as secondary in importance. Virchow assigns as a cause peritonitis and pseudo-membranous adhesions with constriction of the affected tube. Spiegelberg speaks of swelling of the tubal mucous membrane and obstructive collection of secretions. Klob mentions hernia of the mucous membrane and consequent arrest of peristalsis; or polyps of the uterine end may obstruct the ovum in its passage. It is also said that deficient, or absent, motion of the cilia is a cause of delay in the passage of the ovum, so that it finally grows too large for further progress. Any or all of these causes may at times be present, but they are not sufficient to account for a double recurrent tubal gestation. An abnormal formation of the tube, due to defect in embryonic development is the common source, and it affects both tubes equally. Freund's researches have shown that the tubes, after the union of the middle parts of Müller's ducts has formed the uterus, show a spiral, corkscrew-like twist, involving the whole tube. This occurs during the descent of the duct. When this has reached its greatest length, the turns begin to smooth themselves laterally from the uterus. These turns may remain as a permanent arrest of development, the surroundings being in no way involved and no trace of perisalpingitis or pelviperitonitis can be found. The condition may be often seen in the bodies of children. Thus any healthy woman is liable to a tubal pregnancy from her tubes remaining in an infantile state and the pregnancy be physiological. Again, the tubal canal does not always run in the middle of the tube cylinder; its course may be most devious, approaching and receding from the surface of the tube, which thus having walls of unequal thickness and resistance, the growing ovum distends it at the point of least resistance, and may thus be arrested in its progress. Another antecedent cause may be found in the so-called diverticulum of the tubal canal. The ovum may be entangled therein. To establish a diagnosis of single or recurrent tubal pregnancy, special importance attaches to the extension of a decidua from the uterus, though its absence is no proof that the gestation does not exist. A microscopic examination of the membrane is essential, though it is not certain that from it its extra-uterine character can be determined certainly. In various conditions membranes are thrown off from the uterus, thus: 1st. In extra-uterine pregnancy. 2d. Dysmenorrhœa membranacea. 3d. In intra-uterine pregnancy with abortion. In the first, the cellular part of the gland layer is fully differentiated, the inner layer is extended, the outer remains in the uterus. In the second, all the elements of the normal mucous membrane are cast off. On its surface is normal epithelium; the deep glands have their epithelium unaltered. All sorts of cells are found in their connecting tissues, and foci of infiltration abound. In the third, one finds either ovular débris or membranes showing the unmistakable evidences of pregnancy. The chief difference between the decidua of extra-uterine pregnancy and that of dysmenorrhœic membrane lies in the presence or absence of glands.

The treatment of this condition is laparotomy and removal of the sac. At the time the other tube should be examined, and if found to be spiral or twisted it should also be removed. Neither injection of the sac nor electro-puncture gives any positive assurance that subsequent rupture and hemorrhage may not occur.

UTERUS SUBSEPTUS.

CEPINSKY (*Centralblatt für Gynäkologie*, 1893, No. 33) reports the details of an interesting case of a double vagina in a woman twenty-six years of age. Menstruation regular. On examination the external genitals were found normal. The introitus vaginæ was not median, but by the side of the right labium majus. Hymen gone. Near the introitus was discovered a second opening 50 mm. broad, surrounded by a fringe of mucous membrane, through which a sound was passed into a second vagina, narrower than the first, but otherwise perfect. From either a sound could be introduced into the uterus, each vagina having a separate and perfect portio vaginæ uteri. Whether the division that completely separated these vaginæ extended throughout the uterine cavity could not be determined. The uterus was of normal size. Coitus easy and normal. A year later the patient returned for advice, complaining of irregular hemorrhage from the genitals accompanied by uterine pain. Had not menstruated for ten weeks. Examination showed the old anomaly with bleeding from the small opening of the left vagina. In the right vagina the os was open and there was hemorrhage therefrom. As the vaginal vault was pressed with the speculum a segment of fetal membrane was observed to pass out of the os. Corpus uteri enlarged and soft. Abortion occurred on the following day, the ovum being the size of a plum, and in it an embryo three centimetres long was found. Ten days after the abortion, for experiment, milk was injected through the left cervix into the uterine cavity and this was observed to flow out through the right os.

GYNECOLOGY.

UNDER THE CHARGE OF

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THE CURATIVE EFFECT OF CELIOTOMY ON PERITONEAL TUBERCULOSIS.

WARNEK (*Centralblatt für Gynäkologie*, 1893, No. 50), after reviewing all the evidence in favor of the cure of tuberculous peritonitis by simple abdominal incision, with or without drainage, arrives at the conclusion that whenever the cavity is opened the peritoneum undergoes a certain amount of irritation, due to the change in its physiological condition caused by the entrance of air and the lowering of its normal temperature. In the case of various manipulations of the abdominal contents, by irrigation, sponging, the separation of adhesions, etc., an additional element of irritation is introduced, which is manifested not only by congestion of the serous surface, but by the subsequent formation of adhesions, which may in time be entirely absorbed, as shown by secondary operations. It is well known that in cases of ascites due to secondary papillary or carcinomatous growths on the peritoneum, the fluid may

quickly reaccumulate after severalappings, but when an exploratory incision is made this may not occur, although the conditions remain unchanged. Hence the following conclusions may be drawn: After the abdomen has been opened in a case of tuberculosis and the peritoneum has been irritated by manipulation, a plastic exudate is thrown out and adhesions are formed. Provided that no conditions are present favorable to their further development, the bacilli are destroyed by this exudate and the tubercles undergo fibrous degeneration. In the course of time the exudate is absorbed and a cure of the disease results.

NEW METHOD OF TREATING PERITONEAL TUBERCULOSIS.

NOLEN (*Berliner klin. Wochenschrift*, 1893, No. 24), being convinced that the favorable results observed after cœliotomy are due to the simple contact of air with the peritoneum, has conceived the idea of introducing air into the abdominal cavity through a needle. He reports three cases, two of which were successful. In these, repeatedappings had been employed, but the ascitic fluid always reaccumulated, until air was pumped in by means of an apparatus devised by the writer. A third successful case is reported by Mosetig-Moorhof.

TREATMENT OF STERILITY.

SEELIGMAN (*Münchener med. Wochenschrift*, 1893, No. 45) has found that in his experience the husband is in fault in 75 per cent. of the sterile marriages, through azoospermia due to double epididymitis. That the latter condition is not necessarily hopeless was shown by the reappearance of living spermatozoa in the semen after treatment. He recommends the active treatment of gonorrhœal epididymitis as soon as possible after the inflammatory stage, with a view to prevention.

The application of galvanism to the cervical endometrium is often successful, as well as the use of the faradic current in cases where there is entire absence of sexual response on the part of the female.

THE ACTION OF SALICYLIC ACID ON THE UTERUS.

BINZ (*Berliner klin. Wochenschrift*, 1893, No. 41) states that salicylate of sodium has a beneficial effect in cases of dysmenorrhœa and scanty menstruation not due to chlorosis. In gouty subjects it is indicated in cases of menorrhagia, as well as in patients who are prone to early abortion.

VAGINO-FIXATION OF THE UTERUS.

KNORRE (*Centralblatt für Gynäkologie*, 1893, No. 51), in an extended article, reports the results of a series of twenty-four cases operated upon in Küstner's clinic according to Mackenrodt's method. Of these only nine were entirely successful. He regards the operation as indicated in all cases of retroversion with a movable uterus that cannot be kept in position by a pessary, especially when there are accompanying lacerations of the cervix and perineum; also when the patient cannot tolerate a pessary. It is contra-indicated in

prolapsus, in retroflexion with fixation, and in cases in which a cure can be expected with a pessary.

NEW OPERATION FOR STENOSIS OF THE OS UTERI.

POZZI (*Annales de Gynécologie et d'Obstétrique*, December, 1893) describes the procedure thus: He first divides the cervix on both sides with scissors, then excises a wedge from each flap on either side of the canal—four in all. The mucous membrane of the vagina is united to the mucosa of the cervical canal with silver-wire sutures in such a way as to close the four raw surfaces. The result is a condition similar to that of an ordinary bilateral laceration, but without the formation of cicatricial tissue and the disturbances to which this gives rise.

FIBROMYOMA OF THE OVARY OR BROAD LIGAMENT.

DELEGRANGE (*Archives de Tocologie et de Gynécologie*, 1893, No. 12) reports a case of fibromyoma of the ovary weighing nearly seven pounds. The tumor was adherent and the pedicle was twisted several times about its long axis. On section the growth showed hemorrhagic softening. There was some doubt as to whether it originated in the ovary or in the broad ligament. The writer gives the histories of six reported cases of pedunculated fibromyoma of the broad ligament, from which he makes the following deductions: Ascites was seldom present to any extent. In most cases the tumor grew rapidly and was accompanied by severe pain, probably due to the presence of adhesions. The differential diagnosis from ovarian fibroma, or even from pedunculated uterine fibroid is practically impossible. The surgical treatment of these neoplasms presents no special features.

PSEUDO-MEMBRANOUS ENTERITIS FROM A GYNECOLOGICAL STANDPOINT.

MONOD (*Ibid.*) concludes an article on this subject as follows: 1. Pseudo-membranous enteritis is frequently observed in connection with disease of the uterus and adnexa. 2. It affects the large intestine and gives rise to chronic constipation with colicky pains. 3. It may coexist with membranous dysmenorrhœa. 4. Sometimes it seems to be due to compression of the rectum by the retroflexed uterus. 5. In some instances it seems fair to infer that it is the result of the extension of an inflammatory process from the uterus or peri-uterine tissues. 6. The possibility of its existence should be borne in mind in all cases of intractable abdominal pain in patients with pelvic trouble. A careful study of the symptoms will show that these are often due not to disease of the uterus or adnexa, but to the intestinal tract.

TREATMENT OF INFLAMMATION OF THE ADNEXA.

JACOBS, of Brussels (*Ibid.*), reports eighty-six cases of celiotomy for disease of the adnexa, with five deaths; and one hundred and forty cases of vaginal extirpation of the uterus, with diseased tubes and ovaries, with only two deaths. In the former series the result was only partly successful in thirty cases, while in the latter he obtained a cure in one hundred and